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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/656,365	09/08/2003	Takashi Soya	03500.017679.	8240
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5514 7590 09/03/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

NGUYEN, HUNG

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,365

Applicant(s)

SOYA, TAKASHI

Examiner

Hung Henry V Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☒ Claim(s) 3 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Suga et al (U.S.Pat. 6,059,285).

With respect to claim 1, Suga et al (figure 13) discloses a sheet conveying apparatus comprising all basic features of the instant claim such as: a pair of sheet transporting rollers (1a, 1b) having rotary shafts provided coaxially with each other along a cross direction perpendicular to a transportation direction of a sheet (S), and rotatively driven independently of each other via drive motors (M1, M2) to thereby transport the sheet (see col.1, lines 67 thru col.2 line 9 and

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col.7, lines 5-10); detector sensors (4a, 4b), along with detectors (3S, 3L; and 32, see col.5, lines 60-63) can be regarded as “detecting means extending along the cross direction”, as claimed, for detecting a transported state of the sheet transported by the pair of sheet transporting members (see col.7, lines 11-15; and 56-60; col.8, lines 20 thru col.9 line 11) and control means (70) for controlling the pair of sheet transporting rollers on the basis of detection information of the detecting means (4a, 4b, 3S, 3L) to correct a sheet position in the cross direction and a skew feed posture of the sheet relative to the transport direction (see figure 14).

As to claim 2, Suga et al discloses the control means (70) for controlling driving speeds of the pairs of sheet transporting rollers in accordance with a detection results obtained from the detecting means (see col.8, lines 20-32 and col.25, lines 22-25).

As to claims 4-5, Suga et al discloses the detectors are disposed downstream (see col.22 lines 5-10) or upstream (see col.21, lines 65 thru col.22, line 1) of the pair of sheet transporting rollers with respect to the transport direction of the sheet.

Regarding claim 6, Suga et al further teaches the control system (70) controls the pairs of sheet transporting rollers (2) to correct a deviation of the sheet in the cross direction simultaneously with correcting a deviation of the sheet in a skew feed direction (see col.8, lines 20-45).

With respect to claim 7, Suga et al discloses calculating means (71) for calculating on the basis of the detectors, a movement direction and a movement amount of the sheet in the cross direction relative to a normal transported position and a skew feed direction and a skew feed amount.

Allowable Subject Matter

4. Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

Claim 3 has been found to be allowable since while the prior art or record teaches a sheet carrying apparatus having a line sensor for detecting position of the sheet edge in the horizontal scanning direction but the prior art of record either alone or in combination, neither discloses nor makes obvious the combination of an image forming apparatus having, among other features, a line sensor arranged parallel to the cross direction for detecting a transported state of the sheet transported by a pair of sheet transporting member, and satisfying condition, as cited in the instant claim.

6. Claim 8 has been found to be allowable since the prior art of record does not specifically teaches correcting a deviation in the skew feed direction of the sheet on the basis of the total skew feed direction and the total skew feed amount, as recited in the instant claim of the present invention.

Prior Art Made of Record

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Tanaka et al (U.S.Pat. 5,609,428) and Maruyama et al (U.S.Pat. 5,918,876) discloses sheet conveying apparatuses, each of which comprises substantially all elements as recited in the instant claims and have been cited for technical background.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V Nguyen whose telephone number is 571-272-2124. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hung Henry V Nguyen
Primary Examiner
Art Unit 2851

hvn
9/1/04